## The 5 Fs Instructional Model

Stage of the Instructional	The Teacher	The Student
Model  ENGAGE I nitiates the learning task. The activity should make connections between past and present learning experience, and anticipate activities and organize students' thinking toward the learning outcomes and current activities.	<ul> <li>Creates interest.</li> <li>Generates curiosity.</li> <li>Raises questions and problems.</li> <li>Elicits responses that uncover students' current knowledge about the concept/topic.</li> </ul>	<ul> <li>Asks questions such as, "Why did this happen?" "What do I already know about this?" "What can I find out about this?" "How can this problem be solved?"</li> <li>Shows interest in topic.</li> </ul>
EXPLORE Provide students with a common base of experiences within which current concepts, processes, and skills are identified and developed.	<ul> <li>Encourages students to work together without direct instruction from the teacher.</li> <li>Observes and listens to students as they interact.</li> <li>Asks probing questions to redirect students' investigations when necessary.</li> <li>Provides time for students to puzzle through problems.</li> <li>Acts as a consultant for students.</li> </ul>	<ul> <li>Thinks creatively within the limits of the activity.</li> <li>Tests predictions and hypotheses.</li> <li>Forms new predictions and hypotheses.</li> <li>Tries alternatives to solve a problem and discusses them with others.</li> <li>Records observations and ideas.</li> <li>Suspends judgment.</li> <li>Tests ideas.</li> </ul>
EXPLAIN Focus student's attention on a particular aspect of their engagement and exploration experiences, and provide opportunities to demonstrate their conceptual understanding, process skills, or behaviors. This phase also provides opportunities for teachers to introduce a concept, process, or skill.	<ul> <li>Encourages students to explain concepts and definitions in their own words.</li> <li>Asks for justification (evidence) and clarification from students.</li> <li>Formally provides definitions, explanations, and new vocabulary.</li> <li>Uses students' previous experiences as the basis for explaining concepts.</li> </ul>	<ul> <li>Explains possible solutions or answers to other students.</li> <li>Listens critically to other students' explanations.</li> <li>Questions other students' explanations.</li> <li>Listens to and tries to comprehend explanations offered by the teacher.</li> <li>Refers to previous activities.</li> </ul>

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ELABORATE Challenge and extend students' conceptual understanding and skills. Through new experiences, the students develop deeper and broader understanding, more information, and adequate skills.	<ul> <li>Expects students to use vocabulary, definitions and explanations provided previously in a new context.</li> <li>Encourages students to apply the concepts and skills in new situations.</li> <li>Reminds students of alternative explanations.</li> <li>Refers students to alternative explanations.</li> </ul>	<ul> <li>Applies new labels, definitions, explanations, and skills in new, but similar, situations.</li> <li>Uses previous information to ask questions, propose solutions, make decisions, and design experiments.</li> <li>Draws reasonable conclusions from evidence.</li> <li>Records observations and explanations.</li> </ul>
EVALUATE Encourage students to assess their understanding and abilities and provide opportunities for teachers to evaluate student progress.	<ul> <li>Refers students to existing data and evidence and asks, "What do you already know?" "Why do you think ?"</li> <li>Observes students as they apply new concepts and skills.</li> <li>Assesses students' knowledge and/or skills.</li> <li>Looks for evidence that students have changed their thinking.</li> <li>Allows students to assess their learning and group process skills.</li> <li>Asks open-ended questions such as, "Why do you think " "What evidence do you have?" "What do you know about the problem?" "How would you answer the question?"</li> </ul>	Checks for understanding among peers. Answers open-ended questions by using observations, evidence, and previously accepted explanations. Demonstrates an understanding or knowledge of the concept or skill. Evaluates his or her own progress and knowledge. Asks related questions that would encourage future investigations.